

**Amendment and Response**

Applicant: Andrew M. Spencer

Serial No.: 10/689,157

Filed: October 20, 2003

Docket No.: 10013891-1

Title: REMOVABLE INFORMATION STORAGE DEVICE THAT INCLUDES A MASTER ENCRYPTION  
KEY AND ENCRYPTION KEYS

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**REMARKS**

The following remarks are made in response to the Office Action mailed November 21, 2007. Claims 16-26 have been withdrawn from consideration. In the Office Action, claims 1-15 and 27-30 were rejected. No claims have been amended in this Response. Claims 1-15 and 27-30 remain pending in the application and are presented for reconsideration and allowance.

**Claim Rejections under 35 U.S.C. § 102**

In the Office Action, claim 27 was rejected under 35 U.S.C. 102(e) as being anticipated by Mihm et al (US 2003/0236983 A1) (“Mihm”). Applicants respectfully traverse this rejection.

To anticipate a claim under 35 USC 102, the reference relied upon must disclose each claim element. MPEP 2131. Without specifically pointing out the particular disclosure of these method steps, the Office Action merely references paragraphs 0034 and 0035, and claims 7 and 13 of Mihm. Paragraphs 0034 and 0035 discuss the system illustrated in Figure 1 of Mihm, which is reproduced below.

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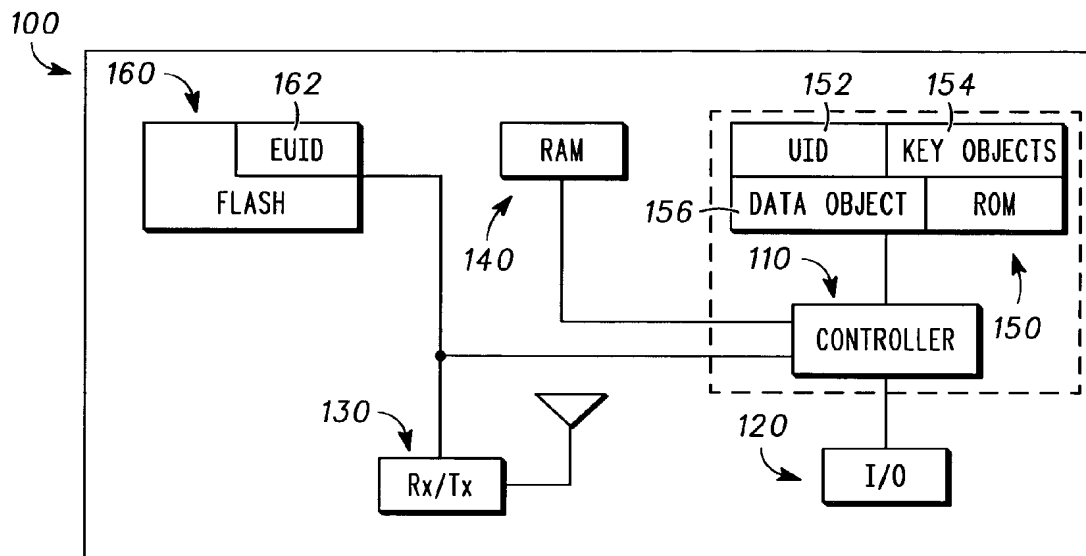
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**FIG. 1**

The Office Action does not specifically note which elements of Mihm Figure 1 equate to respective elements of claim 27. Mihm teaches the use of an encrypted unique identification number (EUID) 162, stored in the NV memory 160. To the extent the UID is considered a key, claim 27 requires

*reading a master encryption key from a non-volatile memory;[and]  
encrypting each one of the encryption keys using the master encryption key*

The Office Action does not identify a teaching in Mihm of reading a master encryption key from a NV memory and using the master encryption key to encrypt other keys. Figure 1 and paragraph 0034 disclose a ROM 150 that includes key objects 154. However, the Office Action fails to identify where Mihm teaches the key objects 154 being a “master key” and used to encrypt the UID, resulting in the EUID 162. Moreover, the UID does not appear to be a key, but rather, is a unique identifier that can be used to generate an encryption key. Paragraph 0035 of Mihm teaches, “a service provider may use the UID of a particular cellular or wireless subscriber to generate an encryption key used to encrypt data

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sent to the subscriber, wherein only the cellular subscriber having the UID will be able to decrypt the encrypted data.” Thus, the EUID of Mihm does not appear to be an encryption key.

Claim 27 further includes, “writing the encrypted encryption keys to a random access memory.” Figure 1 of Mihm shows a RAM 140, but the Office Action does not identify a teaching in Mihm of writing or storing encrypted keys in the RAM 140. Mihm appears to teach away from storing an encrypted item in the RAM 140, since the EUID is stored in the flash memory 160, not the RAM 140.

Mihm thus fails to disclose each element of claim 27, and therefore cannot anticipate the claim. Accordingly, Applicants request withdrawal of the rejection under 35 USC 102.

**Claim Rejections under 35 U.S.C. § 103**

In the Office Action, claims 1-15 and 28-30 were rejected under 35 U.S.C. 103(a) as being unpatentable over Mihm, and further in view of Fujita (US 6,947,318 B1, “Fujita”). Applicants respectfully traverse these rejections.

In establishing a *prima facie* case of obviousness, each claim element must be considered. MPEP 2143. The combination of Mihm and Fujita fails to disclose or even suggest each element of at least independent claims 1 and 28, thus failing to establish *prima facie* obviousness.

The Office Action alleges that Mihm discloses each limitation of claim 1, except the use of a magnetic memory. However, the Office Action fails to equate specific elements disclosed in Mihm with the recited claim elements.

Claim 1 is directed to a removable information storage device that includes “a non-volatile memory configured to store a master encryption key.” The Office Action fails to identify by Figure and reference number where the limitations of claim 1 are taught or suggested in Mihms. Rather, the Office Action simply generally refers to paragraphs 0034 and 0035 of Mihm.

Paragraph 0034 of Mihm refers to Figure 1 thereof. Figure 1 of Mihm appears to disclose three memory elements: RAM 140, ROM 150 and Flash 160. Of these, only the ROM 150 appears to include a key: “key objects” 154.

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Claim 1 further recites,

*a non-volatile magnetic memory configured to store encryption keys which have been encrypted using the master encryption key and to store data which has been encrypted using the encryption keys*

The Flash memory 160 includes an encrypted unique identifier (EUID) 162.

However, the Office Action fails to identify a disclosure or suggestion in Mihm of the EUID being an encryption key used to encrypt data. Rather, in paragraph 0035, Mihm teaches using the UID to generate an encryption key:

*“a service provider may use the UID of a particular cellular or wireless subscriber to generate an encryption key used to encrypt data sent to the subscriber, wherein only the cellular subscriber having the UID will be able to decrypt the encrypted data.”*

Thus, the EUID itself does not appear to be an encryption key as recited in claim 1. Moreover, claim 1 includes a magnetic memory that store data which has been encrypted using the encryption keys, in addition to storing encrypted encryption keys. The Office Action does not identify a teaching or suggestion in Mihm of storing data encrypted by the EUID (if the EUID were a key) in the flash memory 162.

Applicants thus respectfully submit the Office Action fails to establish prima facie obviousness of claim 1, as well as claims 2-15 dependent on claim 1.

Independent claim 28 recites a method that includes

*reading the encrypted encryption keys from the magnetic random access memory; reading a master encryption key from a first non-volatile memory; and decrypting each one of the encryption keys using the master encryption key.*

The Office Action cites the same portions of Mihm generally referenced in the rejection of claim 1 with regard to claim 28, alleging that Mihm discloses each element of claim 28 except the use of a magnetic memory.

Figure 1 of Mihm illustrates a flash memory 160 including an encrypted UID (EUID) 162. A ROM 150 includes key objects 152. However, the Office Action fails to identify where in the cited portions Mihm teaches reading encrypted key objects 152 from the ROM

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150 and decrypting them using the EUID 162, or alternatively, reading the key objects 152 from the ROM 150 and using them to decrypt EUIDs 162 from the flash memory 162.

As such, claim 28 and claims 29 and 30 dependent thereon are believed to be patentable over the combination of Mihms and Fujita.

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**CONCLUSION**

In view of the above, Applicants respectfully submit that all of the pending claims are in form for allowance and are not taught or suggested by the cited references. Therefore, reconsideration and allowance of the claims is respectfully requested.

No fees are required under 37 C.F.R. 1.16(h)(i). However, if such fees are required, the Patent Office is hereby authorized to charge Deposit Account No. 08-2025.

The Examiner is invited to contact the Applicant's representative at the below-listed telephone numbers to facilitate prosecution of this application.

Any inquiry regarding this Amendment and Response should be directed to either Wendell J. Jones at Telephone No. (208) 396-2544, Facsimile No. (208) 396-3958 or Steven E. Dicke at Telephone No. (612) 573-2002, Facsimile No. (612) 573-2005. In addition, all correspondence should continue to be directed to the following address:

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P.O. Box 272400  
Fort Collins, Colorado 80527-2400

Respectfully submitted,

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Date: February 21, 2008

SED/MLG:cjs

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